

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1-6. (Cancelled)

7. (Currently amended) A noninvasive continuous blood pressure measuring apparatus comprising:

oscillating means for generating an oscillation signal having a desired frequency and a desired amplitude;

an exciter arranged responsive to said oscillation signal for inducing an exciter waveform in an artery and blood in said artery of a living body;

a sensor arranged a predetermined interval apart from said exciter for receiving said induced exciter waveform transmitted through said artery from said living body and outputting a detection signal;

calibration hemadynamometer means for detecting absolute values of a maximum blood pressure and a minimum blood pressure of said living body;

calculating means for receiving absolute values from said calibration hemadynamometer means and successively calculating and outputting an instantaneous blood pressure value from a phase relation between said oscillation signal and said detection signal and said absolute values; and

displaying means for displaying a continuous blood pressure variation from said instantaneous blood pressure successively outputted by said calculation means;

~~The noninvasive continuous blood pressure measuring apparatus as claimed in claim 5, wherein said oscillation means comprises~~ includes:

clock signal generation means for generating a clock signal;

a numerically-controlled oscillator responsive to frequency control data and said clock signal for successively generating frequency signal data indicative of amplitude in time base in accordance with said frequency control data;

a d/a converter for converting said frequency signal data; and

filter means for low-pass filtering an output of said d/a converter and outputting said oscillation signal of which frequency is controlled in accordance with said frequency data.

8. (Currently amended) A noninvasive continuous blood pressure measuring apparatus comprising:

oscillating means for generating an oscillation signal having a desired frequency and a desired amplitude;

an exciter arranged responsive to said oscillation signal for inducing an exciter waveform in an artery and blood in said artery of a living body;

a sensor arranged a predetermined interval apart from said exciter for receiving said induced exciter waveform transmitted through said artery from said living body and outputting a detection signal;

calibration hemodynamometer means for detecting absolute values of a maximum blood pressure and a minimum blood pressure of said living body;

calculating means for receiving absolute values from said calibration hemodynamometer means and successively calculating and outputting an instantaneous blood pressure value from a phase relation between said oscillation signal and said detection signal and said absolute values; and

displaying means for displaying a continuous blood pressure variation from said instantaneous blood pressure successively outputted by said calculation means;

~~The noninvasive continuous blood pressure measuring apparatus as claimed in claim 5, wherein said oscillation means comprises~~ includes:

clock signal generation means for generating a clock signal;

a processor responsive to frequency control data for generating one cycle of frequency signal data and storing said one cycle of frequency signal data in a look-up table;

address signal generating means for generating an address signal in response to said clock signal to operate said look-up table to successively read and output the one cycle of frequency data indicative of an amplitude of said oscillation signal;

a d/a converter for converting said one cycle of frequency data; and

filter means for low-pass filtering an output of said a/d converter and outputting said oscillation signal of which frequency is controlled in accordance with said frequency data.

9. (Currently amended) A noninvasive continuous blood pressure measuring apparatus comprising:

oscillating means for generating an oscillation signal having a desired frequency and a desired amplitude;

an exciter arranged responsive to said oscillation signal for inducing an exciter waveform in an artery and blood in said artery of a living body;

a sensor arranged a predetermined interval apart from said exciter for receiving said induced exciter waveform transmitted through said artery from said living body and outputting a detection signal;

calibration hemodynamometer means for detecting absolute values of a maximum blood pressure and a minimum blood pressure of said living body;

calculating means for receiving absolute values from said calibration hemodynamometer means and successively calculating and outputting an instantaneous blood pressure value from a phase relation between said oscillation signal and said detection signal and said absolute values; and

displaying means for displaying a continuous blood pressure variation from said instantaneous blood pressure successively outputted by said calculation means;

~~The noninvasive continuous blood pressure measuring apparatus as claimed in claim 5,~~ wherein said oscillation means ~~comprises~~ includes:

a PLL circuit responsive to frequency control data for successively generating a frequency signal; and

filter means for low -pass filtering said frequency signal and outputting the filtered frequency signal as said oscillation signal of which frequency is controlled in accordance with said frequency data.

10-31. (Cancelled)